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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,609	10/13/2000	Armando Montalvo	PD-990304	9945
7590	10/19/2005		EXAMINER	
HUGHES ELECTRONICS CORPORATION CORPORATE PATENTS & LICENSING BLDG. R11, MALL STATION P.O. BOX 956 EL SEGUNDO, CA 90245-0956			SHERKAT, AREZOO	
		ART UNIT	PAPER NUMBER	
		2131		
DATE MAILED: 10/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/688,609	MONTALVO, ARMANDO
	Examiner	Art Unit
	Arezoo Sherkat	2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 27 May 2005.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-10 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 13 October 2000 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

**Reopening of Prosecution - New Ground of Rejection After Appeal**

In view of the Appeal Brief filed on May 27, 2005, PROSECUTION IS HEREBY REOPENED. A new ground of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 ; or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

For the purpose of search and examination, the specification does not have enough support to make it clear expressly how "Biological Analog Model" is implemented. Applicant discloses "Virtual Biological Fluid 40 acts as a sensor of intruder movements and actions and includes one or more "cells" 46. Cells 46 act as security processors as well as communication nodes. Because of the flexible nature of walls 42 and 44, the present invention is capable of using constructive key management and distribution". In his analogy, Applicant fails to elaborate on what he means by a first and second flexible walls 42 and 44 and how they work in relation to biological fluid 40, that is, the sensor of intruder movements and actions. Applicant also fails to disclose how satellite 12 uses the information from all layers of communications to form a security pannel.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Preston et al., (U.S. Publication No. 2002/0032853 and Preston hereinafter), in view of Willis et al., (U.S. Patent No. 6,385,647 and Willis hereinafter).

Regarding claim 1, Preston discloses a virtual biological fluid system for secure communications (i.e., systems and methods for layered, secured data communications), said system comprising:

a plurality of communication layers (Page 6 ,Par. 0058); and  
a security control plane (i.e., security manager) formed using information from each of said plurality of communications layers, whereby said security control plane in conjunction with said security information forms a virtual biological fluid insuring secure data transmission (i.e., systems and methods for layered, secured data communications)(Pages 2-3, Par. 0014-0022).

Preston does not expressly disclose a primary gateway having security information.

However, Willis discloses a primary gateway having security information (i.e., content provider gateway)(Col. 15, lines 34-67 and Col. 16, lines 1-56).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teachings of Preston with the teachings of Willis to include a primary gateway having security information with the motivation to reduce the risk of exposing (sensitive) information to interception by third parties (Willis, Col. 15, lines 34-45).

Regarding claim 10, Preston discloses a method for secure communications over a network, said method comprising the steps of:

generating security data (Page 4, Par. 0044);

forming a security control plane (i.e., security manager) using information from a plurality of communications layers (Page 6 ,Par. 0058); and

forming a virtual biological fluid (i.e., systems and methods for layered, secured data communications) using said security control plane (i.e., security manager) in conjunction with said security data (Pages 2-3, Par. 0014-0022).

Preston does not expressly disclose whereby secure data transmission between a ground gateway and a station may occur and communicating secure data between said ground gateway and said station.

However, Willis discloses whereby secure data transmission between a ground gateway and a station may occur and communicating secure data between said ground gateway and said station (i.e., content provider gateway)(Col. 15, lines 34-67 and Col. 16, lines 1-56).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teachings of Preston with the teachings of Willis to include a primary gateway having security information with the motivation to reduce the risk of exposing (sensitive) information to interception by third parties (Willis, Col. 15, lines 34-45).

Claims 2-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Preston et al., (U.S. Publication No. 2002/0032853 and Preston hereinafter) and Willis et al., (U.S. Patent No. 6,385,647 and Willis hereinafter), in view of Greene, (U.S. Patent No. 6,578,145 and Greene hereinafter).

Teachings of Preston and Willis have been discussed previously.

Regarding claim 2, Preston discloses a virtual biological fluid system for secure communications (i.e., systems and methods for layered, secured data communications).

Preston does not expressly disclose a primary gateway having security information.

However, Willis discloses further comprising:

at least one station in communication with said primary gateway (i.e., content provider gateway)(Col. 15, lines 34-67 and Col. 16, lines 1-56); and

a satellite in orbit (i.e., satellite 130) and in communication with said primary gateway (i.e., content provider gateway) and said at least one station (i.e., one or more client computers 1215)( Col. 15, lines 34-67 and Col. 16, lines 1-56 and Col. 17, lines 50-67 and Col. 18, lines 1-40).

Preston or Willis does not expressly disclose wherein said security control plane is on board said satellite.

However, Greene discloses wherein said security control plane is on board said satellite (Col. 7, lines 21-67 and Col. 8, lines 1-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the combination of teachings of Preston and Willis with the teachings of Greene because it would allow to include security control plane (i.e., security module) on board the satellite with the motivation to provide a system and a method of adding multiple secure keypads to a system that currently

supports only one secure keypad without compromising security or backward compatibility (Greene, Col. 3, lines 1-5).

Regarding claim 3, Preston discloses wherein at least one of said plurality of communication layers is an application layer (Page 6, Par. 0058-0059).

Regarding claim 4, Preston discloses wherein at least one of said plurality of communication layers is a presentation layer (Page 6, Par. 0058-0059).

Regarding claim 5, Preston discloses wherein at least one of said plurality of communication layers is a session layer (Page 6, Par. 0058-0059).

Regarding claim 6, Preston discloses wherein at least one of said plurality of communication layers is a transport layer (Page 6, Par. 0058-0059).

Regarding claim 7, Preston discloses wherein at least one of plurality of communication layers is a network layer (Page 6, Par. 0058-0059).

Regarding claim 8, Preston discloses wherein at least one of said plurality of communication layers is a data link layer (Page 6, Par. 0058-0059).

Regarding claim 9, Preston discloses wherein at least one of said plurality of communication layers is a physical layer (Page 6, Par. 0058-0059).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arezoo Sherkat whose telephone number is (571) 272-3796. The examiner can normally be reached on 8:00-4:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arezoo Sherkat  
Patent Examiner  
Group 2131  
Oct. 5, 2005



Primary Examiner  
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10/13/05